

REMARKS

1. The Examiner has rejected claims 1-6 under 35 U.S.C. 103(a) as unpatentable over Hurter et al, US 6,302,997 (the " '997 Patent") in view of El Shall (US 6,632,327). In particular, Examiner states that all the elements of claim independent claim 1 are disclosed by the '997 Patent, except for the precipitation of silicate from the filtrate, and that El Shall discloses the acidification of filtrate to precipitate silicate and the removal of the silicate. The Examiner has also stated that the disclosure in El Shall that the acidification of the alkaline spent digestion liquor produces a gelatinous or gummy mass that cannot be separated from the liquor in a practical manner in (see column 3, lines 3-16), provides motivation for the one of ordinary skill in the art to combine the teachings of the '997 Patent and El Shall obtain Applicant's invention as specified in claim 1.

2. The applicant has amended independent claim 1 to incorporate the pH range of former dependent claim 4 (pH range of 7 to about 11). Former dependent claim 4 is presently cancelled. Support for the amendment may be found in paragraphs [19] and [23].

3. Applicant hereby presents the declaration of Robert W. Hurter under 37 CFR Sec. 1.132. Mr. Hurter is Professional Engineer and is one skilled in the art in the pulp and paper mill industry. Further, Mr. Hurter is a co-inventor of the '997 Patent that the Examiner is citing against the application in the present office action.

4. Applicant respectfully traverses Examiner's objections based on the amendment to independent claim 1 described above, and based on the declaration of Mr. Hurter. As mentioned above, independent claim 1 of the present application has been amended to stipulate a pH range of 7 to about 11. As stated in Mr. Hurter's declaration, in paragraph 5, an alkaline range of 7 to about 11 will not dissolve substantial amounts of lignin. Mr. Hurter clearly states that the process disclosed in the '997 Patent is directed to delignification, not desilication as in the present invention. In paragraph 6, Mr. Hurter describes the differences in the equipment utilized in the practice of the present application compared to the equipment disclosed in the '997 Patent in support of the statement that the process of the present application is directed to desilication, not delignification.

5. Mr. Hurter also states in paragraphs 5 and 7 that one skilled in the art would identify the process of the present application as a pre-pulping process that would precede a pulping process. Mr. Hurter states that the alkaline extraction process of the '997 Patent is a pulping process, not a pre-pulping process.

6. Based on the amendments made to independent claim 1 and based on the declaration of Mr. Hurter, the Applicant respectfully restates its position that the '997 Patent does not disclose pre-pulping stage desilication, that is, desilication prior to alkaline extraction of lignin. Furthermore, El Shall discloses desilication from the filtrate of the alkaline extraction of lignin. Applicant's pre-pulping step does not include the necessary pH levels typically required for the alkaline extraction of lignin. Therefore, a mild alkaline digestion sufficient for the extraction of silica, separate from the extraction of lignin which occurs during pulping, is not disclosed nor suggested by Hurter and El Shall.

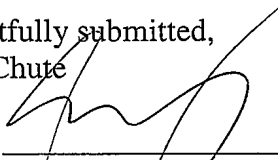
Therefore, as amended, Applicant respectfully submits that claims 1-3 and 5-6 comply with 35 U.S.C. 103(a) and are patentable over Hurter et al (US 6,302,997) in view of El Shall (US 6,632,327).

CONCLUSION

Applicant submits that claims 1-3 and 5-6 are now in condition for allowance, and allowance is respectfully requested.

Respectfully submitted,
Wade Chute

By



Edward Yoo
(Reg. No. 41,435)

CORRESPONDENCE ADDRESS Customer No. 22828

Enclosures:

1. Petition for a one month extension.
2. Credit Card Payment Form
3. Declaration under 37 CFR 1.132